

Missouri Department of Health and Senior Services
Division of Community and Public Health
Section for Environmental Public Health
Bureau of Environmental Epidemiology
Environmental Public Health Tracking Program



MISSOURI EPHT LOGIC MODEL & STRATEGIC FRAMEWORK

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Table of Contents

Point of Contact	1
Media Contact	1
Vision	2
Mission	2
Strategic Situation	3
Background and Purpose	4
Logic Model Summary	5
Strategic Framework	6
Activity:	
<i>Operate, maintain, and enhance the Missouri EPHT Network for the collection, access, analysis and dissemination of environmental public health data, knowledge and information.</i>	6
Outcome	6
Objectives, Strategies, and Actions	6
Outputs	8
Activity:	
<i>Promote the use of Missouri's EPHT Network through marketing and outreach.</i>	10
Outcome	10
Objectives, Strategies, and Actions	10
Outputs	13
Activity:	
<i>Use the EPHT Network to guide policy and other actions to improve the health, safety and well-being of Missouri citizens.</i>	14
Outcome	14
Objectives, Strategies, and Actions	14
Outputs	15
Activity:	
<i>Foster collaboration among Missouri's EPHT partners.</i>	17
Outcome	17
Objectives, Strategies, and Actions	17
Outputs	20
Estimated Timetable of Outputs	21
Acronyms Used in this Plan	25
Plan Development and Maintenance	26

Point of Contact

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Vision

Healthy Missourians living in healthy communities for life.

Each Missourian has a right to a healthy life and a responsibility to make choices so that we have lifelong health. Our vision is for healthy Missourians throughout life: from conception to natural death. Together we can achieve this vision. Our health is our wealth.

Mission

To provide information to and receive information from the National EPHT Network by compiling, combining, and translating public health and environmental data into meaningful information that leads to increased knowledge that is used to increase the health of Missourians and their communities.

The Missouri Department of Health and Senior Services is the public health agency for Missouri. It is our role to promote health and to protect the citizens of Missouri. Promoting and protecting health is a big job, requiring partnerships that are broad and inclusive. It is our mission to be a leader in promoting, protecting, and partnering for health.



Strategic Situation

The environment unquestionably plays an important role in human development and health. Although some links between environmental exposures and diseases--such as asbestos and lung cancer--are well documented, others--such as environmental exposures and childhood cancers--remain unproven. Domestic environmental public health concerns need to be addressed first; however, ultimately global issues need to be addressed because many environmental public health threats do not respect national boundaries.¹

Existing environmental hazard, exposure, and disease tracking systems are not consistently and uniformly linked together. This disconnect makes it difficult to identify correlations and monitor relationships among hazards, exposures, and health effects.

The need to develop, build, and maintain an Environmental Public Health Tracking Network that integrates health information with environmental hazards and risk data has been acknowledged for many decades. With the successful development and implementation of the Environmental Public Health Tracking (EPHT) Network the foundational structure that was needed has been met.

The ability to integrate disparate data sources, coupled with the demand for instant gratification or response, has rapidly moved beyond many organizations governing policies, procedures, analytical abilities, thought processes, and statute mandated laws. This creates a high level of frustration and a certain amount of distrust among the public, policy makers, and legislatures. Due to the frustration and distrust many of these entities believe that the data stewards are attempting to hide or misdirect those asking for data.

The EPHT Network has begun to address these demands for accurate, fine granularity, meaningful data. EPHT is bringing uniformity and consensus to many of the existing environmental data systems. In addition, any new databases developed by EPHT grantees are being developed with these components, which allow advanced analysis and correlations to be established. This allows relationships between hazards, exposures, and health effects to be developed and studied. This effort provides the policy and decision makers to have access to accurate meaningful data in the shortest time possible to address possible response and remediation to environmental challenges.

The Missouri EPHT Network helps to protect communities by providing information to federal, state, and local agencies. These agencies, in turn, will use this information to plan, apply, and evaluate public health actions to prevent and control environmentally related diseases.

¹ Centers for Disease Control and Prevention, Initials. (n.d.). Report of the tracking network workgroups. Retrieved from <http://www.cdc.gov/nceh/tracking/pdfs/wgreport.pdf>

Background and Purpose

Missouri's Department of Health and Senior Services (DHSS) has been a leader in the development and implementation of the EPHT Network since its inception in October 2002. With this funding, the EPHT program has developed and implemented a portal with public and secure components. In September 2008 Missouri successfully launched its public and secure EPHT portal.

Missouri's portal integrates health information with environmental hazard and risk data; and contains multiple core data sets and Nationally Consistent Data Measures (NCDM), dynamic data queries, searchable metadata, and interactive mapping. The Missouri EPHT portal is a component of the national Centers for Disease Control and Prevention's (CDC) EPHT Network.

The purpose of this project is to expand, enhance, and strengthen both the national and Missouri EPHT Network portals to continue to identify environmental exposure, environmental hazard and risk data, and provides a basis for evidence based decision-making making and policy decisions. The Missouri EPHT project strives to bring consistency and uniformity to how environment, hazard, exposure, risk, and tracking databases collect and store the data that are developed, analyzed, presented, and distributed to entities looking for environmental information and analyses. This is evidenced most strongly in a massive undertaking by DHSS to develop a department wide data system based on the EPHT template.

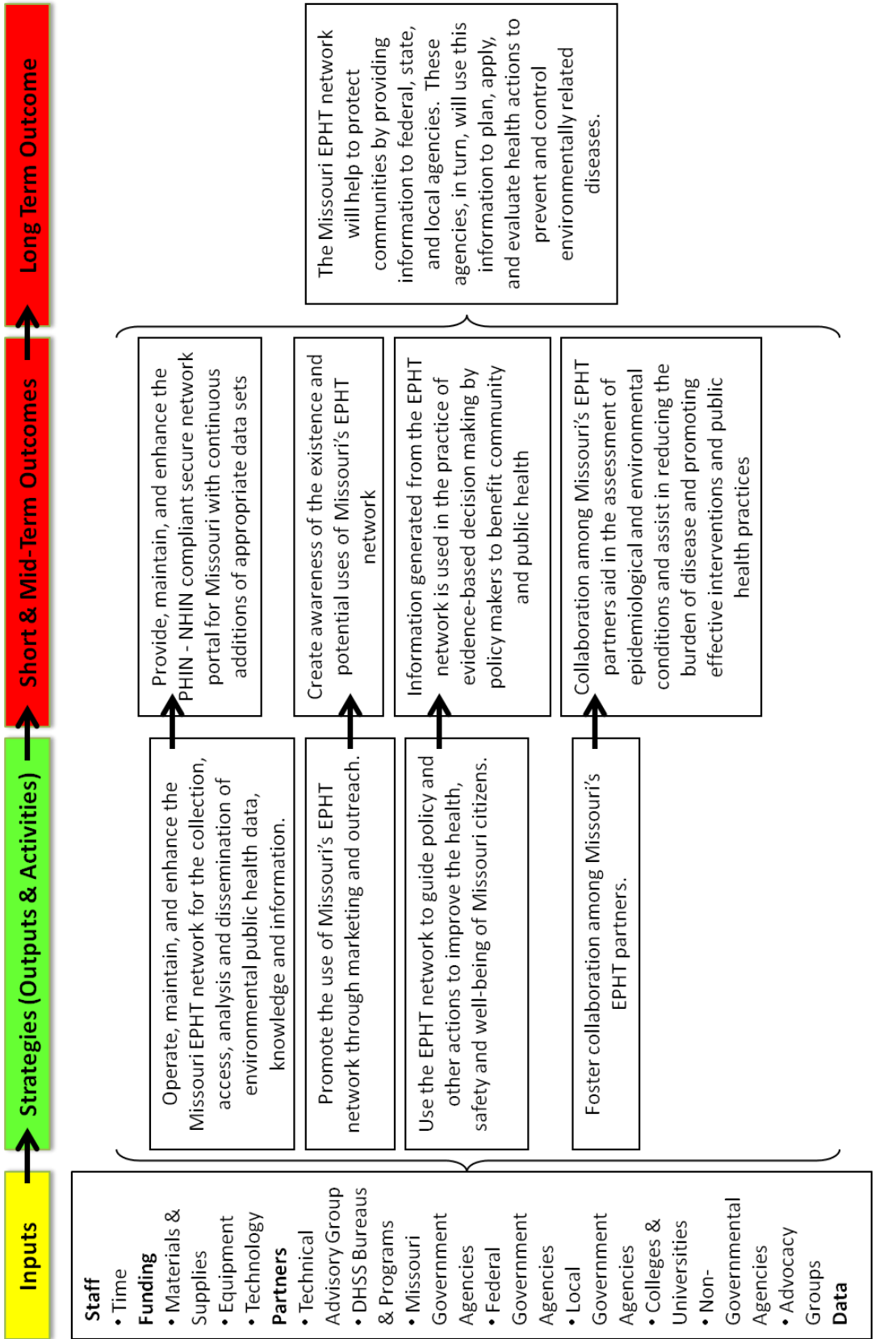
Missouri EPHT continues to nurture its multiple long term data partnerships while always looking for new partners, with additional data sources, with which to collaborate. Missouri EPHT's collaborative efforts span the gamut of 115 Local Public Health Agencies (LPHAs), multiple Missouri state government agencies, other EPHT partner states, and several federal agencies. Missouri EPHT collaborates with these entities in an effort to enhance coordination and information exchange between the community, the Missouri EPHT program, and all partner entities.

The Missouri EPHT's primary objective is to provide information to, and receive information from, the national EPHT Network by compiling, combining, and translating public health and environmental data into meaningful information that leads to increased knowledge that is used to increase the health of Missourians and their communities.



Missouri Environmental Public Health Tracking (EPHT)

Logic Model



Logic Model Summary

Strategic Framework

Activity

Operate, maintain, and enhance the Missouri EPHT Network for the collection, access, analysis, and dissemination of environmental public health data, knowledge and information.

Outcome: To provide, maintain, and enhance the PHIN- NHIN compliant secure network portal for Missouri with continuous additions of appropriate data sets throughout the life of the EPHT Network.

Objective: House and maintain data in a way that can be added to the National EPHT Network.

Strategy: Maintain and refine data and data quality standards for Missouri.

Actions:

- Maintain the existing DHSS PHIN infrastructure including EPHT functions.
- Evaluate and refine Missouri's Data Investigation, Collection, and Evaluation (MoDICE) protocol.
- Continue evaluation of potential sources for CDC determined core data conditions.
- Identify and evaluate potential sources for additional core and complementary data.

Strategy: Participate in the development and continued refinement of data standards.

Actions:

- Participate in National EPHT Network efforts to develop best practices, processes, products, toolkits, and communities of practice.
- Continue participation in content workgroups (CWG).
- Continue participation and cooperation with EPHT Network affiliated colleges and universities.
- Attend conferences, workshops, conference calls, and other EPHT Network related activities involving the Standards and Network Development (SND), Program Marketing and Outreach (PMO), and Principal Investigator (PI)/Project Manager (PM) workgroups.

Objective: Provide secure access to data for approved EPHT Network users.

Strategy: Maintain and enhance the Missouri portal to disseminate EPHT Network-related information and data.

Actions:

- Investigate, negotiate, and incorporate reciprocal data sharing agreements with data stewards to obtain access to appropriate data, analyses, and information.
- Investigate and incorporate technologies and tools to aid and evaluate the interoperability of the Missouri secure EPHT Network portal.
- Implement and maintain the Missouri EPHT Security Protocol in accordance to Office of Administration (OA)-Information Technology Services Division (OA-ITSD) policies and procedures.
- Monitor and maintain all secure user request and access documentation and information for a minimum of 3 years.
- Create mobile device compatible presentations of both data analyses and mapping applications.

Strategy: Provide access to share metadata among potential users.

Actions:

- Require use of the approved EPHT metadata template, a template of minimum core Federal Geographic Data Committee (FGDC) metadata elements, for the Tracking Network as established by the Metadata Workgroup.
- Continue to assess and modify the metadata template to include additional FGDC recommended elements.

Strategy: Assure role-based security using “least-access” methods.

Actions:

- Provide role-based security that complies with PHIN standards in accordance with appropriate National Institute of Standards and Technology (NIST) guidelines by extending DHSS security systems to meet the requirements of EPHT role-based access.
- Provide secure access to DHSS developed web-based query and analysis tools for data within the DHSS data warehouse to other agencies participating in the Missouri EPHT Network.
- Provide public access to DHSS developed web-based query and analysis tools for data available on Missouri’s EPHT web portal.

Objective: Continue to provide, maintain, and enhance mechanisms for secure data transport.

Strategy: Maintain secure data transport in compliance with PHIN-NHIN standards.

Actions:

- Provide for connectivity in accordance with existing NIST standards of practice.
- Implement EPHT Network compliant gateways as recommended by the SND workgroup.

Strategy: Participate in the continued development of security standards and best practices.

Actions:

- Ensure membership and participation on national subgroups and teams.

Objective: Continue participation in the DHSS data standardization initiative.

Strategy: Assist in the design, development, testing, implementation, and deployment of the new department wide data system based on the EPHT template using relational database structures and custom data cube query tools.

Actions:

- Ensure membership and participation in all steering committee and workgroup meetings.
- Provide expertise and staffing to complete project design, development, and testing requirements.
- Assist OA-ITSD staff in the implementation and deployment of the new data system and data cube query tools.
- Coordinate with data stewards to ensure data quality and consistency across program jurisdictions.

Outputs:

- Participate in all EPHT conference calls beginning in August 2014.
- Complete evaluation of the MoDICE protocol by December 2014.
- Complete and test identified revisions of the MoDICE protocol by June 2015.
- Convert, test, and deploy mobile device compatible presentations of city & county level profile reports and mapping applications for core content areas by December 2014.
- Identify additional data content area to be incorporated on the web-portal by December 2014.
- Identify data sources for the additional data content area by April 2015.
- Convert, test, and deploy mobile device compatible presentations of additional data content area by December 2015.
- Review all internal security policies and procedures that support role-based access of internal, external, and public users to the Missouri EPHT Network by March 2015.
- Participate in Missouri DHSS initiative to streamline and standardize the data request process across all divisions by July 2015.

- Identify and add any appropriate Tracking Network security roles to the DHSS directory by December 2015.
- Review security assessment criteria, including PHIN Preparedness Cross Functional components certification self-assessment and NIST special publication (SP) 800-26 assessment by March 2015.
- Review existing Missouri web resources and incorporate into the EPHT Network portal by July 2015.
- Negotiate file transfer protocols and appropriate data sharing agreements (DSAs) for additional data sources by June 2015.
- Establish and implement data exchanges with two state partners and/or allied agencies by August 2015.
- Metadata templates will be reviewed and updated on an annual basis beginning September 2014.
- Completion of metadata templates for additional measures by July 2015.
- Publish identified data for additional core measures on the state EPHT Network web-portal by October 2015.
- Extend the web-portal to include all EPHT Network approved components by December 2015 or other mutually agreed upon date between the CDC and the Missouri DHSS/EPHT team.
- Participate in all DHSS data standardization initiative project meetings beginning in August 2014.
- Begin quality assurance and control procedures on relational database/data cube query tools to ensure data quality and consistency across program jurisdictions in September 2014.

Activity

Promote the use of Missouri's EPHT Network through marketing and outreach.

Outcome: To create awareness of the existence and potential uses of Missouri's EPHT Network.

Objective: Enhance Missouri's workforce and infrastructure.

Strategy: Develop and coordinate EPHT Network-related training for DHSS, allied agencies, and LPHAs.

Actions:

- Offer training opportunities to LPHA staff to increase knowledge of products and abilities available on the nation and Missouri EPHT Network portals.
- Provide opportunities for LPHA staff to complete the national EPHT 101 course.
- Provide opportunities for LPHA staff to complete training courses available through the National Environmental Health Association (NEHA).

Strategy: Facilitate the development and use of the EPHT Network by allied agencies.

Actions:

- Offer training opportunities to allied agency staff to increase knowledge of products and abilities available on the nation and Missouri EPHT Network portals.
- Provide opportunities for allied agency staff to complete the national EPHT 101 course.
- Provide opportunities for allied agency staff to complete training courses available through NEHA.

Objective: Facilitate the awareness and use of the EPHT Network by implementing social media and marketing outreach opportunities.

Strategy: Collaborate with the DHSS Office of Public Information (OPI) to promote the awareness and use of the EPHT Network via the DHSS Facebook and Twitter social networking sites.

Actions:

- Compile a list of health and environmental observances and create appropriate outreach messaging for each observance.
- Incorporate social networking site provided outreach data into the Missouri EPHT Outreach Plan.

Strategy: Collaborate with DHSS OPI, sister programs within the Bureau of Environmental Epidemiology (BEE), and other partners to combine compatible messages and cross promote the awareness and use of the EPHT Network.

Actions:

- Compile a list of health and environmental observances and investigate the potential for coordinating outreach messaging among partners.
- Invite partners to cross promote messaging in EPHT products and at EPHT affiliated events.
- Request partners to incorporate EPHT outreach messages in partner products and at partner affiliated events.

Strategy: Investigate, evaluate, and incorporate Internet based social media, marketing, and network sites that could be used to promote the awareness and use of the EPHT Network.

Actions:

- Investigate new social media technologies, as they become available, for potential inclusion in Missouri's EPHT outreach approach, within accepted department standards and practices.
- Coordinate promotion opportunities with DHSS OPI to encourage the use and interaction of partners and the public through social media.

Objective: Facilitate the awareness and use of the EPHT Network by traditional sources.

Strategy: Work in collaboration with sister programs within BEE to promote the awareness and use of the EPHT Network via health fairs, home shows, and other public events.

Actions:

- Assist in the development, design, and presentation of messaging used by BEE.
- Provide materials and manpower to operate displays such as health fairs, home shows, and other public events.

Strategy: Work in collaboration with allied agencies to promote the awareness and use of the EPHT Network via conferences, workshops, trade shows, and other events.

Actions:

- Provide materials and technical assistance to partners.
- Coordinate cross-promotional opportunities between and across agencies.

Strategy: Investigate, evaluate, and incorporate opportunities to promote the awareness and use of the EPHT Network via traditional media sources (e.g., advertisements and/or articles).

Actions:

- Cooperate and coordinate with partners and allied agencies to promote the EPHT Network through their newsletters and other selected media.
- Coordinate and disseminate media and materials supplied by the CDC, partners, and allied agencies.

Objective: Facilitate the awareness and use of the EPHT Network by accredited schools of Public Health as well as colleges and universities with complementary areas of study.

Strategy: Investigate opportunities to interact with faculty and librarians to promote products and data available on the Missouri and national EPHT Network portals.

Actions:

- Investigate and identify which majors and/or areas of study would be most likely to benefit from the use of the EPHT Network.
- Compile a resource listing of potential contacts to target with information on EPHT Network assets and accomplishments.
- Cooperate with, and coordinate, the inclusion of the national PMO recommended outreach agenda.

Strategy: Investigate, evaluate, and incorporate EPHT products and data into appropriate field of study curricula.

Actions:

- Work in collaboration with sister programs within BEE and allied agencies to promote the awareness and use of the EPHT Network via campus public events (e.g., visit days).
- Provide internship opportunities to students majoring in health and/or environmental areas of study.
- Target selected college and university contacts with information detailing data, tools, and products available on the EPHT Network on an annual basis.
- Solicit input from EPHT Network users on new areas of interest and or subject matter for inclusion on the Missouri portal.

Outputs:

- Deliver quarterly electronic newsletters to LPHA staff to highlight available products and abilities of the Missouri and national EPHT Networks beginning January 2016.
- Provide training sessions for EPHT Network users employed by LPHAs by July 2016.
- Develop “hands-on” training exercises on EPHT functionalities and products for display at conferences, workshops, and other outreach events by April 2016.
- Compile a comprehensive health and environmental observance listing by October 2015.
- Incorporate the comprehensive health and environmental observance listing into the Missouri Outreach Plan by November 2015.
- Develop and implement campaigns that highlight partners for use on social media, to facilitate cooperation across programs beginning October 2015.
- Review DHSS policies, standards, and practices relating to social media and marketing and the incorporation of new social technologies and products on a quarterly basis beginning August 2015.
- Disseminate Missouri and national EPHT Network educational and outreach products at conferences, workshops, and other outreach events beginning August 2015.
- Provide Missouri and national EPHT Network educational and outreach products for dissemination at partner sponsored/attended events beginning August 2015.
- Solicit user feedback of the Missouri EPHT Network portals on the usability and presentation of the Missouri EPHT Network by April 2016.
- Disseminate Missouri and national EPHT Network educational and outreach products at collegiate level campus outreach events beginning August 2015.
- Solicit input from EPHT Network users on new areas of interest and/or subject matter for inclusion on the Missouri portal beginning August 2015.
- Partner with Missouri’s Coordinating Board for Higher Education (CBHE) and Department of Elementary and Secondary Education (DESE) to identify institutions and areas of study most likely to benefit from use of the EPHT Network by December 2015.
- Compile a resource listing of potential college and university contacts by March 2016.
- Develop and implement a collegiate level outreach campaign targeting students enrolled in health and/or environmental areas of study by June 2016.
- Create an annual executive summary of EPHT activities, to include national and grantee partners, and make it available on the Missouri EPHT portal starting by July 2016.
- Provide internship opportunities to Missouri collegiate level students majoring in health and/or environmental areas of study beginning August 2015.
- Investigate opportunities to launch an EPHT focused campaign featuring radio, television, newspaper, and local/regional magazine advertisements by July 2016.

Activity

Use the EPHT Network to guide policy and other actions to improve the health, safety and well-being of Missouri citizens.

Outcome: Information generated from the EPHT Network is used in the practice of evidence-based decision making by policy makers to benefit community public health.

Objective: Identify, facilitate, and communicate emerging issues and the risks from environmental exposures to DHSS, allied agencies, and LPHAs.

Strategy: Provide decision support services to DHSS management and the public.

Actions:

- Utilize the Senior Epidemiology Specialist to assist in the ongoing design, integration, and implementation of the state EPHT Network and serve as a content expert.
- Conduct periodic bureau, section, and division management update briefings.
- Conduct analysis on EPHT identified core topics.
- Perform in-depth analysis and ad-hoc reporting, of topics of interest upon management request, and assist in the interpretation of findings.

Strategy: Expand the use of available technologies to improve the identification, facilitation, and communication of EPHT information.

Actions:

- Utilize geographic analysis to identify exposure sources.
- Utilize Interactive Mappers to improve the dissemination of EPHT information.
- Utilize peer reviewed tools and methodologies to facilitate the display and interpretation of EPHT Network data.
- Conduct ongoing evaluation of emerging technologies and methodologies for potential inclusion to the Missouri EPHT Network portal.
- Convert existing EPHT portal offerings to mobile device compatible presentations.

Strategy: Utilize existing relevant datasets to identify potential EPHT-related conditions.

Actions:

- Identify and evaluate health outcomes for inclusion in the Missouri EPHT Network.

- Negotiate DSAs to obtain relevant datasets.
- Assist in the collection, handling, and analysis of data to determine if condition/exposure relationships exist.

Strategy: Collaborate with DHSS, allied agencies, and LPHAs by providing EPHT information to assist in the development of interventions and preventions.

Actions:

- Determine target markets (stakeholders) and utilize personal contacts to assure that key partners are included in dialogues about implementation of the state and national EPHT Networks.
- Act as a resource for dissemination of EPHT data and information.

Objective: Expand and continue to develop the use of EPHT Network opportunities to guide policy, practice, and other actions among a virtual technical advisory group (VTAG).

Strategy: Research and evaluate available technologies to facilitate the development and implementation of the VTAG online community.

Actions:

- Coordinate with OA-ITSD to determine which technology platform would provide maximum functionality to the VTAG.
- Continue the evaluation of emerging technologies, tools, and methodologies for potential inclusion in the EPHT VTAG community.

Strategy: Implement, deploy, and maintain the recommended technical advisory group (TAG) virtual community solution.

Actions:

- Incorporate existing DHSS assets and resources into the TAG virtual community solution.
- Collaborate with sister programs and partners to maximize use and integration of the cyber resource into the Missouri EPHT Network portal.

Outputs:

- Conduct management update briefings on a monthly basis beginning August 2014.
- Perform continual quality control and assurance processes on all datasets included on the Missouri EPHT Network portal beginning August 2014.
- Conduct in-depth analysis and ad-hoc report testing on all datasets included on the Missouri EPHT Network portal on a semi-annual basis beginning October 2014.
- Review and evaluate function and operation of all interactive mapping applications available on the EPHT Network portal on a quarterly basis beginning August 2014.
- Design and implement mobile device compatible mapping applications for deployment on the Missouri EPHT Network portal by December 2014.

- Deploy peer reviewed tools and methodologies to facilitate the display and interpretation of data as they become available and/or when recommended by the CDC/SND team; or at a date mutually agreed upon between the CDC/EPHT Branch and the Missouri DHSS/EPHT team.
- Provide technical assistance and dissemination of health data and information to stakeholders on an ongoing basis starting August 2014.
- Investigate, evaluate, and obtain data steward agreement to include four new data content areas into the Missouri EPHT Network portal by July 2016.
- Participate in workgroups and teams established by partners to assist in the collection, handling, and analysis of data on a continual basis beginning August 2014.
- Coordinate with OA-ITSD to select the platform of Missouri's VTAG by March 2015.
- Implement Missouri's EPHT Network/VTAG community solution by January 2016.
- Solicit feedback from existing technical advisors on the status of the Missouri state EPHT Network by December 2014.
- Recruit at least five new technical advisors to the group by July 2015.
- Incorporate existing Missouri DHSS assets and resources into the VTAG community solution by July 2016.
- Update technical information about the state Network on the Missouri EPHT portal for review and comment by technical advisors by June 2015.
- Meet and collaborate with sister programs and partners to maximize use and integration of the VTAG cyber resource into the Missouri EPHT Network portal on a quarterly basis beginning January 2016.
- Develop and implement an outreach campaign targeting existing and potential TAG members to introduce the new VTAG community solution by July 2016.
- Make recommendations, discuss lessons learned, and evaluate new environmental public health data to be included on the state and national EPHT Networks on an on-going basis beginning August 2014.

Activity

Foster collaboration among Missouri's EPHT partners.

Outcome: Collaboration among Missouri's EPHT partners to aid in the assessment of epidemiological and environmental conditions and assist in reducing the burden of disease and promoting effective interventions and public health practices.

Objective: Identify and recruit partners for inclusion in EPHT Network activities.

Strategy: Deliver presentations and demonstrations to provide detailed information about the EPHT Network.

Actions:

- Utilize a variety of communication strategies including video conferencing, compact disc (CD)-read only memory (ROM) applications, conference presentations, and publication of articles.
- Include promotional and factual information about the EPHT Network and program on the Missouri EPHT Network portal.
- Create and web-publish reports and information to assist sister agencies, partners, and stakeholders in their evidenced-based decision making, planning, and intervention efforts.
- Provide a feedback and suggestion mechanism for visitors to the Missouri EPHT Network portal.
- Provide materials and manpower to partners and stakeholder's public events and outreach efforts.
- Offer consultation and technical assistance.
- Assist in identifying capacity, structure, and opportunities.

Objective: Collaborate with DHSS, allied agencies, Public Interest groups, and fellow EPHT grantee program advisory group(s) to identify environmental public health concerns.

Strategy: Assist in determining items of regional concern.

Actions:

- Initiate, facilitate, and/or participate in regional discussions regarding environmental health concerns.
- Determine potential stakeholders and utilize personal contacts to assure that key partners are included in dialogues about the state and national EPHT Networks.
- Provide opportunities for agencies, organizations, and elected officials to complete the national EPHT 101 course.

- Provide opportunities for agencies, organizations, and elected officials to complete training courses available through NEHA.
- Offer consultation and technical assistance.
- Assist in identifying capacity, structure, and opportunities.

Strategy: Assist in determining items of statewide concern.

Actions:

- Initiate, facilitate, and/or participate in statewide discussions regarding environmental health concerns.
- Evaluate and determine the potential to provide information and act as the repository for environmental public health data and analysis.
- Determine potential stakeholders and utilize personal contacts to assure that key partners are included in dialogues about the state and national EPHT Networks.
- Offer consultation and technical assistance.
- Assist in identifying capacity, structure, and opportunities.

Strategy: Assist in determining items of county and/or local concern.

Actions:

- Initiate, facilitate, and/or participate in local jurisdictional discussions regarding environmental health concerns.
- Evaluate and determine the potential to provide information and act as the repository for environmental public health data and analysis.
- Determine potential stakeholders and utilize personal contacts to assure that key partners are included in dialogues about the state and national EPHT Networks.
- Offer consultation and technical assistance.
- Assist in identifying capacity, structure, and opportunities.

Objective: Identify and improve processes for working with and between partners.

Strategy: Collaborate with EPHT Network designated partners.

Actions:

- Evaluate submitted proposals and promote existing administrative processes and policies to assure timely and effective review and response.
- Promote opportunities for resource sharing at local and regional meetings and conferences.
- Act as a resource for dissemination of EPHT data and information.
- Evaluate partner input for potential inclusion on the Missouri EPHT Network portal.
- Offer consultation and technical assistance.

- Assist in identifying capacity, structure, and opportunities.

Strategy: Collaborate with LPHAs.

Actions:

- Assist LPHA health education staff to create materials for use by the public.
- Promote opportunities for resource sharing at local and regional meetings and conferences.
- Act as a resource for dissemination of EPHT data and information.
- Evaluate partner input for potential inclusion on the Missouri EPHT Network portal.
- Provide opportunities for agencies, organizations, and elected officials to complete the national EPHT 101 course.
- Provide opportunities for agencies, organizations, and elected officials to complete training courses available through NEHA.
- Offer consultation and technical assistance.
- Assist in identifying capacity, structure, and opportunities.

Strategy: Collaborate with community partners.

Actions:

- Assist community partner health education staff to create materials for use by the public.
- Promote opportunities for resource sharing at local and regional meetings and conferences.
- Act as a resource for dissemination of EPHT data and information.
- Evaluate partner input for potential inclusion on the Missouri EPHT Network portal.
- Provide opportunities for agencies, organizations, and elected officials to complete the national EPHT 101 course.
- Provide opportunities for agencies, organizations, and elected officials to complete training courses available through NEHA.
- Offer consultation and technical assistance.
- Assist in identifying capacity, structure, and opportunities.

Strategy: Collaborate with allied agencies and programs.

Actions:

- Evaluate submitted proposals and promote existing administrative processes and policies to assure timely and effective review and response.
- Assist allied agencies and partner health education staff to create materials for use by the public.
- Promote opportunities for resource sharing at local and regional meetings and conferences.

- Act as a resource for dissemination of EPHT data and information.
- Evaluate partner input for potential inclusion on the Missouri EPHT Network portal.
- Provide opportunities for agencies, organizations, and elected officials to complete the national EPHT 101 course.
- Provide opportunities for agencies, organizations, and elected officials to complete training courses available through NEHA.
- Offer consultation and technical assistance.
- Assist in identifying capacity, structure, and opportunities.

Outputs:

- Continue active participation in national workgroups (e.g. PMO, SND, and CWG) beginning August 2014.
- Participate in new national workgroups (e.g. PMO, SND, and CWG), sub-groups, teams, pilots, and other groups as they are identified beginning August 2014.
- Attend all scheduled EPHT conferences, workshops, and meetings beginning in August 2014.
- Solicit and incorporate partner feedback in all Missouri EPHT program evaluation activities beginning August 2014.
- Enhance the Missouri EPHT portal by providing a seamless and transparent transition between the program website, public data portal, and secure data portal by August 2016.
- Produce and web-publish bi-annual updates on EPHT Network development and collaborations by July 2015.
- Collect and evaluate partner input annually, beginning by December 2014.
- Complete annual short and intermediate-term evaluations of the state EPHT Network beginning July 2015.
- Complete long-term evaluation of the state EPHT Network by July 2017.
- Web-publish the *Missouri EPHT Network Status* report annually beginning March 2015.
- Actively monitor and identify public health investigations and interventions that are based on information obtained from the Missouri EPHT Network on an on-going basis beginning August 2014.
- Make recommendations, discuss lessons learned, and evaluate new environmental public health data to be included on the state and national EPHT Networks on an on-going basis beginning August 2014.
- Cooperate and coordinate with DHSS OPI to inform state and local elected officials of the availability and content of the city and county specific profile reports available through Missouri EPHT by October 2014.

Estimated Timetable of Outputs

August 2014 – December 2014:

- Participate in all EPHT conference calls beginning in August 2014.
- Conduct management update briefings on a monthly basis beginning August 2014.
- Perform continual quality control and assurance processes on all datasets included on the Missouri EPHT Network portal beginning August 2014.
- Review and evaluate function and operation of all interactive mapping applications available on the EPHT Network portal on a quarterly basis beginning August 2014.
- Provide technical assistance and dissemination of health data and information to stakeholders on an ongoing basis starting August 2014.
- Participate in workgroups and teams established by partners to assist in the collection, handling, and analysis of data on a continual basis beginning August 2014.
- Make recommendations, discuss lessons learned, and evaluate new environmental public health data to be included on the state and national EPHT Networks on an on-going basis beginning August 2014.
- Continue active participation in national workgroups (e.g. PMO, SND, and CWG) beginning August 2014.
- Participate in new national workgroups (e.g. PMO, SND, and CWG), sub-groups, teams, pilots, and other groups as they are identified beginning August 2014.
- Attend all scheduled EPHT conferences, workshops, and meetings beginning in August 2014.
- Solicit and incorporate partner feedback in all Missouri EPHT program evaluation activities beginning August 2014.
- Actively monitor and identify public health investigations and interventions that are based on information obtained from the Missouri EPHT Network on an on-going basis beginning August 2014.
- Make recommendations, discuss lessons learned, and evaluate new environmental public health data to be included on the state and national EPHT Networks on an on-going basis beginning August 2014.
- Participate in all DHSS data standardization initiative project meetings beginning in August 2014.
- Begin quality assurance and control procedures on relational database/data cube query tools to ensure data quality and consistency across program jurisdictions in September 2014.
- Metadata templates will be reviewed and updated on an annual basis beginning September 2014.
- Conduct in-depth analysis and ad-hoc report testing on all datasets included on the Missouri EPHT Network portal on a semi-annual basis beginning October 2014.
- Cooperate and coordinate with DHSS OPI to inform state and local elected officials of the availability and content of the city and county specific profile reports available through Missouri EPHT by October 2014.
- Complete evaluation of the MoDICE protocol by December 2014.
- Convert, test, and deploy mobile device compatible presentations of city & county level profile reports and mapping applications for core content areas by December 2014.

- Identify additional data content area to be incorporated on the web-portal by December 2014.
- Design and implement mobile device compatible mapping applications for deployment on the Missouri EPHT Network portal by December 2014.
- Solicit feedback from existing technical advisors on the status of the Missouri state EPHT Network by December 2014.
- Collect and evaluate partner input annually, beginning by December 2014.

January 2015 – June 2015:

- Review security assessment criteria, including PHIN Preparedness Cross Functional components certification self-assessment and NIST SP 800-26 assessment by March 2015.
- Coordinate with OA-ITSD to select the platform of Missouri's VTAG by March 2015.
- Web-publish the Missouri EPHT Network Status report annually beginning March 2015.
- Review all internal security policies and procedures that support role-based access of internal, external, and public users to the Missouri EPHT Network by March 2015.
- Identify data sources for the additional data content area by April 2015.
- Complete and test identified revisions of the MoDICE protocol by June 2015.
- Negotiate file transfer protocols (FTP) and appropriate DSAs for additional data sources by June 2015.
- Update technical information about the state Network on the Missouri EPHT portal for review and comment by technical advisors by June 2015.

July 2015 – December 2015:

- Participate in Missouri DHSS initiative to streamline and standardize the data request process across all divisions by July 2015.
- Review existing Missouri web resources and incorporate into the EPHT Network portal by July 2015.
- Recruit at least five new technical advisors to the group by July 2015.
- Produce and web-publish bi-annual update on EPHT Network development and collaborations by July 2015.
- Complete annual short and intermediate-term evaluations of the state EPHT Network beginning July 2015.
- Completion of metadata templates for additional measures by July 2015.
- Establish and implement data exchanges with two state partners and/or allied agencies by August 2015.
- Review DHSS policies, standards, and practices relating to social media and marketing and the incorporation of new social technologies and products on a quarterly basis beginning August 2015.
- Disseminate Missouri and national EPHT Network educational and outreach products at conferences, workshops, and other outreach events beginning August 2015.
- Provide Missouri and national EPHT Network educational and outreach products for dissemination at partner sponsored/attended events beginning August 2015.
- Disseminate Missouri and national EPHT Network educational and outreach products at collegiate level campus outreach events beginning August 2015.

- Solicit input from EPHT Network users on new areas of interest and/or subject matter for inclusion on the Missouri portal beginning August 2015.
- Provide internship opportunities to Missouri collegiate level students majoring in health and/or environmental areas of study beginning August 2015.
- Publish identified data for additional core measures on the state EPHT Network web-portal by October 2015.
- Compile a comprehensive health and environmental observance listing by October 2015.
- Develop and implement campaigns that highlight partners for use on social media, to facilitate cooperation across programs beginning October 2015.
- Incorporate the comprehensive health and environmental observance listing into the Missouri Outreach Plan by November 2015.
- Partner with CBHE and DESE to identify institutions and areas of study most likely to benefit from use of the EPHT Network by December 2015.
- Identify and add any appropriate Tracking Network security roles to the DHSS directory by December 2015.
- Convert, test, and deploy mobile device compatible presentations of additional data content area by December 2015.
- Extend the web-portal to include all EPHT Network approved components by December 2015 or other mutually agreed upon date between the CDC and the Missouri DHSS/EPHT team.

January 2016 – June 2016:

- Deliver quarterly electronic newsletters to LPHA staff to highlight available products and abilities of the Missouri and national EPHT Networks beginning January 2016.
- Meet and collaborate with sister programs and partners to maximize use and integration of the VTAG cyber resource into the Missouri EPHT Network portal on a quarterly basis beginning January 2016.
- Compile a resource listing of potential college and university contacts by March 2016.
- Develop “hands-on” training exercises on EPHT functionalities and products for display at conferences, workshops, and other outreach events by April 2016.
- Solicit user feedback of the Missouri EPHT Network portals on the usability and presentation of the Missouri EPHT Network by April 2016.
- Develop and implement a collegiate level outreach campaign targeting students enrolled in health and/or environmental areas of study by June 2016.

July 2016 – December 2016:

- Provide training sessions for EPHT Network users employed by LPHAs by July 2016.
- Create an annual executive summary of EPHT activities, to include national and grantee partners, and make it available on the Missouri EPHT portal starting by July 2016.
- Investigate opportunities to launch an EPHT focused campaign featuring radio, television, newspaper, and local/regional magazine advertisements by July 2016.
- Investigate, evaluate, and obtain data steward agreement to include four new data content areas into the Missouri EPHT Network portal by July 2016.
- Implement Missouri’s EPHT Network/VTAG community solution by January 2017.

- Incorporate existing Missouri DHSS assets and resources into the VTAG community solution by July 2016.
- Develop and implement an outreach campaign targeting existing and potential TAG members to introduce the new VTAG community solution by July 2016.
- Enhance the Missouri EPHT portal by providing a seamless and transparent transition between the program website, public data portal, and secure data portal by August 2016.

2017 and beyond:

- Complete long-term evaluation of the state EPHT Network by July 2017.

Other

- Deploy peer reviewed tools and methodologies to facilitate the display and interpretation of data as they become available and/or when recommended by the CDC/SND team; or at a date mutually agreed upon between the CDC/EPHT Branch and the Missouri DHSS/EPHT team.

Acronyms Used in this Plan

ASTHO	Association of State and Territorial Health Officials
BEE	Bureau of Environmental Epidemiology
CBHE	Coordinating Board for Higher Education
CD	Compact Disc
CDC	Centers for Disease Control and Prevention
CWG	Content Workgroup
DCPH	Division of Community and Public Health
DESE	Department of Elementary and Secondary Education
DHSS	Department of Health and Senior Services
DSA	Data Sharing Agreement
EPA	US Environmental Protection Agency
EPHT	Environmental Public Health Tracking
FGDC	Federal Geographic Data Committee
IT	Information Technology
ITSD	Information Technology Services Division
LPHA	Local Public Health Agency
MoDICE	Missouri Data Investigation, Collection, and Evaluation
MPH	Masters of Public Health
NAHDO	National Association of Health Data Organizations
NAPHIS	National Association for Public Health Information Systems
NCPHI	National Center for Public Health Informatics
NEHA	National Environmental Health Association
NCDM	Nationally Consistent Data Measures
NHIN	National Health Information Network
NIST	National Institute of Standards and Technology
OA	Office of Administration
OPI	Office of Public Information
PHIN	Public Health Information Network
PI	Principal Investigator
PM	Program Manager
PMO	Program Marketing and Outreach
ROM	Read Only Memory
SEPH	Section for Environmental Public Health
SND	Standards and Network Development
SP	Special Publication
US	United States
TAG	Technical Advisory Group
VTAG	Virtual Technical Advisory Group

Plan Development and Maintenance

This logic model and strategic framework will continue to be revised and updated, as needed, as the program progresses. As part of the EPHT program's ongoing self-assessment, DHSS, OA-ITSD, and other partner entities will meet periodically throughout the year and review this plan to determine whether revisions are needed. Revisions will be published annually.

This logic model and strategic framework is based upon an analysis of existing resources, knowledge of our relationships between agencies, stakeholders, and regional collaborators, and the continuing support of the CDC in their national efforts with organizations such as the Association of State and Territorial Health Officials (ASTHO), National Center for Public Health Informatics (NCPHI), United States (US) Environmental Protection Agency (EPA), National Association of Health Data Organizations (NAHDO), and the National Association for Public Health Information Systems (NAPHIS).

The implementation of this plan could be modified due to issues discovered during the negotiation process for each DSA, reprioritization of information technology (IT) resources, and national or international disasters. In the event of changes to this plan, the Missouri EPHT program will revise the methodology and assess other secondary data sources.

The logic model and strategic framework is posted on the DHSS Internet site and available at: <http://www.health.mo.gov/EPHT/Reports.html>.

 Please consider the environment before printing.